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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/315,713 | 05/20/1999 | AKIO OHBA | SCEI-16.084 | 6857 |

7590 09/25/2002

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EXAMINER

PATEL, KANJIBHAI B

| ART UNIT | PAPER NUMBER |
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2621

DATE MAILED: 09/25/2002

15

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/315,713

Applicant(s)
AKIO OHBA

Examiner
Kanji Patel

Art Unit
2621



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jun 19, 2002
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-27 is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-12, and 15-18 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 13, and 14 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

Art Unit: 2621

Response to Amendment

1. In response to applicant's amendment filed on June 19 2002, all requested changes in the specification has been entered.

Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 6-12, 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art (Figs. 1-5; Pages 1-5 of the specification) admitted by applicant in view of Nakamura et al. (US 5,757,374).

Regarding claims 1, 8 and 9, the admitted prior art system discloses an image processing device comprising:

a first storage (figure 1, element 11) means for storing source image (figure 3) data in units of pixels;

Art Unit: 2621

a second storage (figure 1, element 21) means for storing destination image (figure 5) data in units of pixels;

a rendering means for performing an action of applying a stipulated pixel-unit operation to the source image data stored in said first storage means and rendering the data as destination image data in the second storage means in units repeatedly until a stipulated arithmetic result is obtained (figure 2; page 2 line 3 to page 5 line 20).

Regarding claims 1 and 8-9, the prior art system differs in that the rendering data is not in units of polygons. However, the use of a unit of a polygon or triangle is well known and widely used in graphics. Nakamura et al. provides a system performing texture mapping using a unit of a polygon, explained at least in column 6, lines 11-15, column 8 line 67 to column 9 line 3. He teaches performing drawing on the screen in unit of a polygon. Therefore, it would have been obvious to one of ordinary skill in the art to use units of polygons to modify the prior art system in order to provide a computer graphics apparatus which can efficiently operate the texture mapping function in a computer graphic interface as mentioned by Nakamura et al. at column 7, lines 38-40.

Regarding claims 2 and 11, the prior art system shows the source image data stored in said first storage means is image data output from a video camera (figure 1, element 1).

Regarding claims 3 and 12, the prior art further comprising specification means for specifying an operation mode between said source image data and said destination image data (page 2, lines 3-18).

Art Unit: 2621

Regarding claims 6 and 15, the prior art teaches the stipulated operation is one of convolution filtering, pyramid filtering, interframe differencing, interimage distance computation, Hough transformation, motion blurring or bilinear interpolation (page 2, lines 3-6).

Regarding claims 7 and 16, Penna discloses the image processing device wherein said image processing device is a computer entertainment device (column 4, lines 11-16; note that a television receiver corresponds to an entertainment device broadly).

Regarding claim 10, the admitted prior art system discloses an image processing device comprising:

storage means comprising a first storage unit (figure 1, element 11) that stores source image (figure 3) data in units of pixels and a second storage unit (figure 1, element 21) that stores destination image (figure 5) data in units of pixels;

a generation means that generates rendering commands (figure 1, element 5; rendering commands are supplied by the CPU 5) that cause the action of applying a stipulated pixel-unit operation to the source image (figure 3) data stored in said first storage means (figure 1, element 11) and rendering the data as destination image (figure 5) data in the second storage means (figure 1, element 21) in units to be performed repeatedly until a stipulated arithmetic result is obtained (figure 2; page 2 line 3 to page 5 line 20); and

an execution means that executes rendering commands generated by said generation means (figure 1, element 5; page 1 line 23 to page 2 line 2).

Art Unit: 2621

Regarding claim 10, the prior art system differs in that the rendering data is not in units of polygons. However, the use of a unit of a polygon or triangle is well known and widely used in graphics. Nakamura et al provides a system performing texture mapping using a unit of a polygon, explained at least in column 6, lines 11-15, column 8 line 67 to column 9 line 3. He teaches performing drawing on the screen in unit of a polygon. Therefore, it would have been obvious to one of ordinary skill in the art to use units of polygons to modify the prior art system in order to provide a computer graphics apparatus which can efficiently operate the texture mapping function in a computer graphic interface as mentioned by Nakamura et al. at column 7, lines 38-40.

For claims, 17-18, see the rejection of at least claims 1 and 8-9, in which rendering commands are generated by CPU 10 in figure 1.

Allowable Subject Matter

3. Claims 4-5 and 13-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 4, the prior art on record fails to teach or suggest, alone or in combination, the specification means specifies as said operation mode either a first mode wherein said source image data is added to said destination image data, or a second mode wherein said source image data is subtracted from said destination image data.

Application/Control Number: 09/315,713

Page 6

Art Unit: 2621

Regarding claim 5 and 14, since these claims depends from claims 4 and 13, they are also objected for the same reason.

Claims 19-27 are allowed.

Art Unit: 2621

Contact information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kanji Patel whose telephone number is (703) 305-4011. The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Leo Boudreau, can be reached on (703) 305-4706.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 306-0377.

The fax number for this group is (703) 872-9314.

Kanji Patel

Kanji Patel
Patent Examiner
Group Art Unit 2621
September 19, 2002

Jose L. Cousin
JOSE L. COUSIN
PRIMARY EXAMINER